

Geel 2000 Language Schools

Math Department

First Term

Primary 5

2023 /2024

Unit 1

Lesson 1 : Decimal to the thousandths place

Ex1: Write each of the following in decimal form:
1) 97 hundredths
2) 13 thousandths
3) 94 and 43 hundredths
4) 1 and 5 thousandths
5) 4 and 80 thousandths
Ex2: write each of the following in word form:
1) 57.123
2) 8.008
3) 188.133
4) 89.706
5)5.105
Ex3 : complete :
1) in 987.075 the digit 5 is in the place, its value is
2) in 1,897.743 the digit 4 is in the Place, its value
is
3) in 734.208 the digit 0 is the place, its value
is
4) in 452.019 the digit 4 in the place, its value is
5) in 4.206 the digit 2 in the place, its value
is

Lesson 2 : place value shuffle

Ex1: Use the place value chart to solve the following

Ex1: $12.5 \times 100 = \dots$

Thousands		Ones			Dec	cimals
O	Н	Н Т О			tenths	Hundredths
				•		
				•		

-The value of whole number(increased/decreased) when multiplying by 100

Ex2: $17.5 \div 10 = \dots$

Thousands	Ones			•	Decimals	
O	Н	Н Т О			tenths	Hundredths
				•		
				•		

-The value of whole number(increased/decreased) when dividing by 10

Lesson 3: composing and decomposing decimals.

Ex1: Record the number in the place value chart to decompose this number:

34.546

Thousands	Ones		•	Decimals			
O	Н	T	O	•	tenths	Hundredths	Thousands
				•			

.....

Ex2: Write each of the following in standard form:

- 1) $7 + 0.3 + 0.04 + 0.009 = \dots$
- 2) $400 + 4 + 0.04 + 0.004 = \dots$
- 3) $5,000 + 40 + 9 + 0.2 + 0.007 = \dots$
- 4) 700 + 0.4 + 0.009 =
- 5) $70 + 8 + 0.6 + 0.007 = \dots$
- 6) $0.2 + 0.009 + 10 + 400 = \dots$
- 7) $300 + 0.1 + 0.03 + 8 = \dots$
- 8) $70 + 7 + 200 + 0.5 + 0.08 = \dots$

Lesson 4 : Comparing Decimals.

Ex1: compare the numbers using (>, <or =):

1) 1.002 $\frac{1002}{1000}$
2)6.308 6+0.3+0.008
3)9+0.008 9+0.1+0.001
$4)54.8854\frac{88}{1000}$
5)2 ones, 3 tenths, 4 thousandths 2.34
6)8.004 4 ones, 8 thousandths
Ex2: Order from least to greatest:
1)2.836 , 2.648 , 2.692 , 2.868
2)80.21 , 80.012 , 8.102 , 8.012 , 80.09
• • • • • • • • • • • • • • • • • • • •
3)67.98 , 67.89 , 670.099 , 76.098.
4)4.89 , 48.9 , 40.08 , 40.18 , 40.81
5)679.147 , 678.147 , 678.174 , 678.109

lesson 5 : Rounding Decimals

Ex1: write each of the following to the nearest whole number:

- 1) 0.8≥
- 2)9.7 *\(\sime \)*
- $3)23.4 \simeq$
- 4)1.25 \simeq
- $5)82.71 \simeq$

EX 2: write each of the following to the nearest tenths:

- 1) $76.176 \simeq \dots$
- 2) 25.74 ~
- 3) $152.19 \simeq \dots$
- 4) 34.820 \simeq
- 5) 91.99 ~

EX 3: write each of the following to the nearest thousands:

- 1) $3.0708 \simeq \dots$
- 2) $0.0764 \simeq \dots$
- 3) 99.9996 ~
- 4) $0.0004 \simeq$
- $5)8.0098 \simeq \dots$

Lesson 6: Estimating decimal sums

Ex1:solve all the following and estimate to nearest whole:

- 1) 4.632 + 8.071=..... Estimate
- 2) 3.51 + 1.13=..... Estimate
- 3) 12.67 + 3.16 = Estimate
- 4) 1.291+ 9.124=..... Estimate
- 5) 5.87 + 8.13 = Estimate.....

Ex2: Sayed wanted to ride his bike 60 km this week ,by Thursday he had riden 51.99 km ,on Friday he rode 8.01 km . estimate to see if he has did his goal ?

Lesson 7: Adding decimals.

Ex1: find the sum:

1)
$$0.14 + 0.24 = \dots$$

2)
$$0.37 + 0.12 = \dots$$

3)
$$0.94 + 0.31 = \dots$$

4)
$$0.06 + 0.06 = \dots$$

5)
$$0.54 + 0.61 = \dots$$

7)
$$0.17 + 0.12 = \dots$$

8)
$$0.82 + 0.13 = \dots$$

lesson 8: subtracting decimals:

Ex1: Solve each of the following:

1)
$$0.98 - 0.87 = \dots$$

2)
$$8.16 - 0.04 = \dots$$

3)
$$0.76 - 0.58 = \dots$$

4)
$$4.79 - 2.39 = \dots$$

5)
$$9.129 - 3.111 = \dots$$

6)
$$6.852 - 0.191 = \dots$$

7)
$$7.6 - 2.2 = \dots$$

8)
$$87.29 - 5.06 = \dots$$

Lesson 9: Estimating decimal differences:

Ex1:solve all the following and estimate to nearest whole:

Lesson 10: subtracting to the thousandths place

Ex1: Evaluate each difference and identify each digits place value :

1) 25 thousandths –14 thousandths =....thousandths Place valuehundredths.....thousandths 2) $58 \text{ thousandths} - 8 \text{ thousandths} = \dots \text{ thousandths}$ Place valuehundredths.....thousandths 3) 95 thousandths—54 thousandths =....thousandths Place valuehundredths.....thousandths 4) 67 thousandths -43 thousandths =....thousandths Place valuehundredths......thousandths 5) 96 thousandths—49 thousandths =....thousandths

Place valuehundredths.....thousandths

Lesson 11: decimals story problems:

Ex1: the width of tahya masr bridge, which connects northern and eastern cairo to western cairo across the nile river is 67.3 m and jiaxing-shaoxing sea bridge ir japan is less in width than the tahya masr bridge by 11.7 m. how wide is jiaxing-shaoxing sea bridge?
• • • • • • • • • • • • • • • • • • • •
• • • • • • • • • • • • • • • • • • • •
••••••••••••
• • • • • • • • • • • • • • • • • • • •
• • • • • • • • • • • • • • • • • • • •
Ex2: Amr and his father went fishing .each of them caught againt fish, the mass of the first fish was 53.25 kg, and the mass of the other fish reached 48.8 kg what is the mass of the two fish together?
•••••••••••••••••••••••••••••••••••••••
• • • • • • • • • • • • • • • • • • • •
• • • • • • • • • • • • • • • • • • • •
• • • • • • • • • • • • • • • • • • • •
• • • • • • • • • • • • • • • • • • • •

Unit 2

Lesson 1: Expression, Equutions and Variables:

- Remember:-
 - Variable: It's a letter or symbol that represents the value in an equation.

For ex: X, Y, Z

• Expression: It's a set of a fixed number and variables that line up next to each other.

For ex: X+5, 3xy

• Eqaution: It's mathematical sentence that includes an equal relationship between two mathematical expression.

For ex: 5+X=9, Y=5x3

Practice:

Ex1:Select any of the following sentences is

"Equation", "Mathematical Expression" or

"other":

$$2-4.7+8.9$$
 (.....)

$$3-3.6+N$$
 (.....)

4-
$$3.5 + 2.4 = 2.5 + 3.4$$
 (.....)

5- Amir had 3.5kg of apples.(.....)

6-
$$7 + y$$
 (.....)

Ex2:Read the following story problems. Make an equation for each problem:

1-	Ahmed had 25.15 pounds, and he bought a toy for 14.5 pounds. How many pounds does Ahmed have left?
2-	A farm had 4,200chickens. 3,350 chickens were sold in a week. How many chickens are left on the farm?
3-	If you know that the sum of the height of two trees together is 46 meters and the height of one of them is 18.25 meters, find the unknown height.
	• • • • • • • • • • • • • • • • • • • •

Lesson 2: Variables in Equations

Ex: Find the value of the variable:

1-
$$9 - x = 3.5$$

$$\chi = \dots$$

$$2 - 8.23 + a = 10.24$$

$$a = \dots$$

$$3 - 12 + x = 15$$

$$\chi = \dots$$

4-
$$7 \times 14 = y$$

$$y = \dots$$

5-
$$n - 12.40 = 3.01$$

$$n = \dots$$

Lesson 3: Telling stories with numbers

(1)	If the sum of what Hamza and Ziad is 361.05
	pounds, and Ziad has only 159.85 pounds, then
	how many Hamza has?
• • •	••••••
• • •	•••••
(2)	Write a story problem representing each equation,
	and then solve it:
a	Z + 4.04 = 8.3
	••••••••••••
	•••••••••••

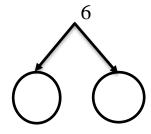
b)	P - 7.825 = 5.66
• • • •	•••••••••••••••••
• • • •	••••••••••••••••
• • • •	••••••••••••••••
• • • •	
• • • •	•••••••••••
c)	9.53 + c = 12.53
	••
• • • •	
• • • •	
• • • •	

Lesson 4 (Prime factorization)

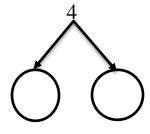
1)Find the factors and determine prime or not prime

21 =×
= ×
Factors are
21 is
7 = ×
Factors are
7 is
10 =×
=×
Factors are
10 is
12
12 =×
=×
=×
Factors are
12 is
1 = 15

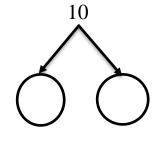
4) Factorize to prime factors using factor tree :



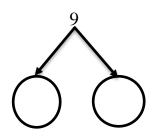
6=....×



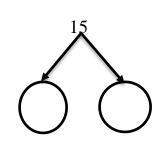
4= ×



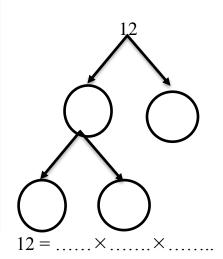
10=.....×

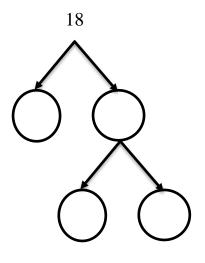


9 = ×

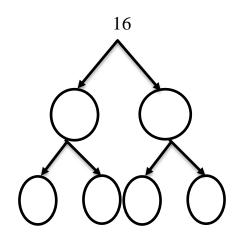


15 =....×





18=....×....



16=.....×.....×.....×.....

Lesson 5 (Greatest common Factors) 1)Find the GCF for each of the following:

a) 28 and 42	b) 16 and 32
28 =	16 =
42 =	32 =
GCF =	GCF =
c) 18 and 27	d) 12 and 20
18 =	12 =
27 =	20 =
GCF =	GCF =
e) 30 and 45	f) 48 and 24
30 =	48 =
45 =	72 =
GCF =	GCF =

Lesson 6 (identifying multiples)

1)complete:

a) List the first five multiple of 7

b) List the first six multiple of 5

c) List the first ten multiple of 3

d) List the first eight multiple of 10

e) List the first twelve multiple of 4

f) List the first nine multiple of 6

2) Underline multiples of 2:

17, 5, 26, 4, 13, 2, 20

3) Underline multiples of 2:

4, 15, 21, 3, 10, 12, 22

4) Underline multiples of 5:

20, 8, 5, 51, 40, 15, 23

Lesson 7 (Least Common Multiple)

1)Find the LCM of the following:
a) 6 and 9
6 =
9 =
LCM =
b) 12 and 9
12 =
9 =
LCM =
c) 10 and 15
10 =
15 =
LCM =
d) 4 and 8 4 =
8 =
I CM —

Lesson 8 (Factors or Multiple)

1)Find GCF and LCM:

a) 12 ar	ıd 9		b)	8 an	1d 4		
12 = .	• • • • • • • •		. 8	$\beta =$			
9 = .	•••••	· · · · · · · · · · · · · · · · · · ·	. 4	ļ =	• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·	• • • •
GCF =	• • • • • • • • • • • • • • • • • • • •		G	CF =	=	• • • • • • • • • • • • • • • • • • • •	• • • •
LCM =	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	L	CM	=	• • • • • • • • •	• • • •
Choose	•						
1)The s	— mallest p	rime num	ber is		• • • • • • • •		
a) 1	b) 2	c) 3		d) 5		
2) The 6	common	factor for	all nuı	nber	s is	• • • • • • • • • •	
•		b) 2					
3) The 1	numbers	3 and 5 fa	ctors c	of		• • • •	
		b) 12					
4) The (G.C.F of	(8,4)	•••••		. •		
,		b) 4					

Unit 3

Lesson 1 (using the area model to multiply)

Ex1: solve the following using area model:

1)
$$321 \times 21 = \dots$$





3)
$$207 \times 13 = \dots$$

4)
$$310 \times 66 = \dots$$



Lesson 2 : (what is the algorithm)

Ex1	: solve the following:
1)	78
	$\times 23$
	•••••
	•••••
	•••••
2)	86
	× 17
	•••••
	•••••
	·
	•••••

<u>lesson 3 (multiplying multi-digit numbers)</u>

Ex1	solve the following:	
1)	2378	
	$\times 21$	
	•••••	
	•••••	
	•••••	
2)	8601	
	$\times 27$	
	•••••	
	• • • • • • • • • • • • • • • • • • • •	
	•••••	

Lesson4 (multiplication problems in the real numbers)

Ex1: Amr ate 2 pieces of pizza each day, the price of each
piece is 7 L.E. how much money will he pay after 120
days ?
•••••
••••••
••••••
Ex2: Adel sells 12 pies each day, she sells each pie for 5
L.E. how much money she will gain after 150 days?
••••••
••••••

Unit 4

Lesson 1:

Dividing by 2 digit number.

Using the area model to divide:

1) $2,613 \div 12 = \dots$	
----------------------------	--

Lesson 2

Estimating Quotients

Estimate the solution of each problem and use the appropriate strategy to solve:

1)	302÷14 =
Estim	ation:
Soluti	ion:
2)	7550 ÷36 =
Estim	ation:
Solut	ion:
3)	5814÷47 =
Estim	ation:
Solu	tion:
,	6397÷28 =
Solut	ion:

Lesson 3

Using the Standard Algorithm to Divide

65 ÷ 15 =	97 ÷ 44 =
456 ÷ 63 =	837 ÷ 56 =
8,457 ÷32 =	9,807 ÷ 13 =

Lesson 4

Division with multiplication

Solve the problem then check it with multiplication:

1) 5325 ÷ 25=
2) 4316 ÷42=
3) 5850 ÷ 26=
4) 3594÷ 19 =

Lesson 5

Multistep story problems

solve: 1) A baker made 480 serving of basbosa for a party . if each baking tray holds 14 servings of basbosa, how many trays will be needed to hold all the basbosa? 2) Mom baked abatch of 215 balah el sham . two balah el sham fell on the floor leaving 10 on the platter, if 13 kids split The remaining balah el sham equally, how many balah el sham will each child get? 3) there were 29 girls and 47 boys in a class . the teacher asked them to work in groups of 12. How many groups were there?

Unit 5

multiplication and division with decimals

Concept 1: multiplying decimals

Lesson 1 : multiplying by power of ten

Complete

X	8	80	800
0.001			
0.01			
0.1			
1			
10			
100			

Lesson 2: multiplying decimals by whole numbers.

Complete:

Lesson 3: multiplying tenths by tenths

Complete:

Lesson 4: Using the area model to multiply decimal.

Complete

$$0.7 \times 0.2 = \dots$$

$$0.07 \times 0.2 = \dots$$

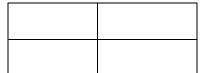
$$0.7 \times 0.02 = \dots$$

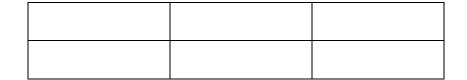
$$0.9 \times 2 = \dots$$

$$0.09 \times .02 =$$

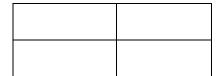
$$0.9 \times 0.02 = \dots$$

Decimal area model

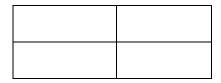




3)2.3 X 4.2 =



4)8.2 X 0.16 =



5)2.15 X 0.35 =

6)16.3 X2.6 =

<u>Lesson 5 : multiplying decimals through the hundredths place.</u>

Find by using the standard algorithm.

1) X	49.35 3.4	2) X	15.4 2.3	3) X	2.25 2.6
	J. 4				
4)	27.34	5)	9.37	6)	7.65
X	2.5	X	0.15	X	24
7)	10.32	8)	25.3	9)	82.5
X		X	7.2	X	1.5

<u>Lesson 6 : multiplying decimals through the thousandths place.</u>

1)	7.102	2)	6.137	3)	2.421
X	0.15	X	2.5	X	1.5
			·		
4)	9.124	5)	7.178	6)	8.257
X	3.6	X	20	X	1.2
7)	2.423	8)	3.271	9)	60.15
X	2.7	X	3.1	X	1.3
					·

Lesson 7: Decimals and the metric system.

Choose the correct answer

$$2)5,267 \text{ mL} = \dots L$$

$$3)25 cm = m$$

$$4)0.4 m =cm$$

$$5) 17.6 \text{ kg} = \dots \text{g}$$

<u>Lesson 8 : Measurment , decimals , and power of ten.</u>

Complete

3)9 cm = m
9 X 0.01 = 9 X
$$\frac{1}{100}$$
 =

Lesson 9: solving multistep story problems.

father drank 0.25 L , How much sugar cane juice is remaining?
2) Nour wants to know how she has grown this year . In January she was 148 cm , by the end of the year she was 1.6 meters tall . How much did Nour grow this year.
3) fatma twin sister Noor also wants to know how much she grew . In January , she was 1.25 meters , at the end of the year , she was 134 centimeters . Who grew more Samar or Noor ?
How much more?

Unit (5) concept 2

Lesson (10) Dividing by Powers of Ten.

Ex. Complete:

$$4-5.9 \div 0.1 = \dots$$

$$600 \div 0.1 = \dots$$

$$6 - 6.17 \div 0.01 = \dots$$

$$600 \div 0.01 = \dots$$

Lesson (11) Patterns and Relationships in powers

of ten.

Ex. complete

$$1-810.04 \div 0.001 = \dots$$
 $810.04 \times 0.001 = \dots$

2-810.04
$$\div$$
 0.01 = 810.04 × 0.01 =

$$3-810.04 \div 0.1 = \dots 810.04 \times 0.1 = \dots$$

$$4-810.04 \div 10 = \dots 810.04 \times 10 = \dots$$

$$5-810.04 \div 100 = \dots$$
 $810.04 \times 100 = \dots$

Ex. Complete

3.
$$7.202 \times \dots = 720.2$$
 $7.202 \div \dots = 720.2$

4.
$$78 \times \dots = 7,800$$
 $78 \div \dots = 7,800$

5.
$$0.35 \times \dots = 0.035$$
 $0.35 \div \dots = 0.035$

Ex. Complete

2.
$$35 \text{ m} = \dots \dots \text{ cm}$$

Lessons 12 :deviding decimals by whole numbers

Ex1: solve all the following using standard algorithm:

1) 16 62.24

2) 5 51.65

3) 30 589.5

Lesson 13: dividing decimals by decimals

Ex1:	solve	all the	following	using	standard	algorithm
•						

Unit 6

Lesson 1: numercal expressions:

Ex 1: complete each of the following:

•••••

.....

.....

.....

•••••

6)
$$89.2 - 19.2 \times 2.1 = \dots$$

.....

7)
$$2.1 \times 1.1 + 0.3 = \dots$$

.....

8)
$$3.5 - 2.5 \times 9.4 =$$

.....

Lesson 2: Numerical Expressions with grouping symbols

Lesson 3: Writing Expressions to represent scenarios Ex1: write expression:

x1 :write expression :	
1)Subtract 5.2 from 9.22 then, multiply the result by 2	

2)Divide 93 by 0.3 and then add 114.7 after, divid the result by 5	.е
3)Multiply 4.3 by 100 .next , subtract 45.8 .then , add 12.4 last, divide the result by 0.1	
•••••••••••••••••••••••••••••••••••••••	• • • •
4)By the difference between 10 and 9.27 multiply by the sum of 54 and 46 then, divide 1,168 by the result	,
	• • • •

<u>Lesson4</u>: identifying numerical patterns

Write the rule of each pattern with avariable , then complete the pattern

a) 52,44,36,28,20, Rule :
b) 23, 27 ,, 35 , 39 , , Rule :
c) 2,4,8,16, , 64 , Rule :
D) 17, ,21 , 23, , Rule :
e) 32 , 16 , 8 , , 2,

Rule:.....